

Analysis of Medicare Beneficiary Knowledge Data Using the Medicare Current Beneficiary Survey (MCBS)

Phase 3.1

Final Report

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Executive Summary

This report uses Rounds 26 and 27 of the 1999 Medicare Current Beneficiary Survey (MCBS) to measure progress toward achieving the education campaign goals following the first national distribution of the *Medicare & You 2000 Handbook*. In addition, we use the MCBS to report trends in selected beneficiary outcomes over a 5-year period (1995 to 1999) that includes implementation of the education campaign. A companion technical note from this phase of the research, *Development and Psychometric Evaluation of Beneficiary Knowledge Indices from the Medicare Current Beneficiary Survey* (Bann and Berkman 2002), was recently prepared. It contained evaluations of three potential knowledge indices that could be used to measure progress toward the education campaign goals.

The broad policy questions of the Medicare beneficiary education campaign that were examined in earlier phases of this research and that are continued in this phase include the following:

- Do beneficiaries have access to (receive) information about Medicare and is this changing over time?
- Are beneficiaries aware of Medicare's features and options and is this changing over time?
- Do beneficiaries understand the information they receive well enough to make informed choices about their Medicare participation and is this changing over time?
- Are beneficiaries using the information they receive to make choices and is this changing over time?

From the 1999 MCBS, we found that over half of noninstitutionalized Medicare beneficiaries remembered receiving a copy of the *Medicare & You Handbook*. These persons are using the Handbook as a reference document; while virtually all kept their copy, most had not read it thoroughly. Less than half of beneficiaries were aware of the Medicare toll-free number. Among those who had Internet access, only a small percentage had visited the official web site for Medicare information. Beneficiaries who made their own healthcare decisions were more likely to remember receiving the Handbook, to be aware of the toll-free number, and to have used the Handbook to look up a telephone number.

Comparison of MCBS data from the 1995 to 1999 surveys showed a significant increase in the percentage of beneficiaries seeking information about Medicare between the 1998 and 1999 MCBS (the years before and after the national distribution of the *Medicare & You Handbook*). In particular, there were significant increases in the percentage of beneficiaries who tried to access information on benefits or changes in the Medicare program, what medical services Medicare does and does not cover, what Medigap or supplemental insurance policies cover, and what beneficiaries need to pay for a particular

service. The most common sources of information beneficiaries used remained relatively constant over time, but by 1999 Medicare publications had become a popular choice. In contrast, beneficiary knowledge, as it was measured by three indices, remained virtually unchanged between MCBS 1998 and 1999. The majority of beneficiaries were satisfied throughout the period with the availability of information about Medicare.

1.0 Introduction

1.1 Overview of the Medicare Program's Beneficiary Education Campaign

Medicare beneficiary communication programs were materially enhanced by the Balanced Budget Act of 1997 (BBA 97), which authorized several new health insurance options for Medicare beneficiaries as part of the Medicare + Choice program. To inform beneficiaries about these changes and to provide them general and comparative information about their health insurance options, the Centers for Medicare & Medicaid Services (CMS) (formerly the Health Care Financing Administration, or HCFA) initiated a National Medicare Education Program (NMEP) campaign. The education campaign is a multifaceted communication program with the ultimate goal of educating Medicare beneficiaries so that they can make more informed decisions about alternatives available to them under the Medicare program. The specific objectives of the campaign are to ensure that beneficiaries have *access* to accurate and reliable information, are *aware* of the different health plan choices available to them, *understand* the consequences of choosing different plans, and are able to *use* the information provided to them when making decisions. CMS would also like beneficiaries to view the Medicare program and its private sector partners as trusted and credible sources of information about Medicare (Goldstein, 1999; Cronin, 2000).

Over the years, a number of studies have demonstrated that adults of all ages have an inadequate understanding of their health insurance coverage (Mechanic, 1989; Isaacs, 1996; Garnick, 1993). There is also a growing body of research documenting the low level of Medicare beneficiary knowledge about the program (Gibbs et al., 1996; Hibbard et al., 1998; Murray and Shatto, 1998; National Academy of Social Insurance, 1998; McCormack et al., 2002). Many have never heard of a Medicare health maintenance organization (HMO), and a majority are unable to tell the difference between the original Medicare program and a Medicare managed care plan (Hibbard et al., 1998). This information is particularly important, as knowing the differences between original Medicare, Medicare HMOs, the newer Medicare + Choice options, and other choices is necessary for informed insurance coverage decisions. The Medicare beneficiary education campaign is CMS's coordinated effort to address this problem, in both the short and long term, by creating useful information resources.

The *Medicare & You* Handbook is the primary print medium that CMS has developed to provide information to beneficiaries. The 1999 version of the Handbook was pilot tested in five states and the Kansas City metropolitan statistical area in fall 1998; in that year, the smaller *Medicare & You* Bulletin was mailed to beneficiaries in all other states. The *Medicare & You 2000* Handbook was mailed

nationally to all 39 million elderly and disabled beneficiaries in fall 1999, and the 2001 Handbook was mailed in fall 2000. In addition to these print materials, the education campaign includes telephone help lines, an Internet information database, training, and support for intermediaries, enhanced beneficiary counseling services, and state- and community-based outreach and education efforts.

1.2 Purpose

This report presents first-year findings from the third phase of the CMS effort to monitor progress toward the Medicare program's beneficiary education campaign goals. The results presented here include trends in beneficiary outcomes over time. We also provide an analysis of data on beneficiary responses to questions in the 1999 MCBS that consider the effect of the *Medicare & You* Handbook on beneficiary access to and awareness of information, as well as their understanding and use of that information. This effort complements earlier analyses of the Handbook's effect performed in Phases 1 and 2 of this project. In the Phase 1 report, RTI identified MCBS survey questions that could be used to establish a pre-educational campaign baseline and assessed the availability of measures of beneficiary knowledge of Medicare. During Phase 2 of this research, we examined the marginal effect of reading the *Medicare & You* Handbook in five test states.

1.2.1 Findings from Phases 1 and 2

The purpose of Phase 1 was to explore potential baseline measures of beneficiaries' Medicare knowledge using the 1995 to 1998 MCBS (Bonito et al., 2000). Potential measures of beneficiary knowledge were identified, as were classes of variables that were used as controls when assessing the impact of the *Medicare & You* Handbook on outcomes of interest. They include

- a self-reported understanding of the Medicare program from MCBS survey Rounds 14, 17, and 20;
- a four-item quiz regarding knowledge of Medicare benefits from Round 18;
- a perceived knowledge of aspects of Medicare from Rounds 18 and 24;
- a global perceived knowledge of Medicare from Round 23; and
- an eight-item quiz on health plan features from Round 23.

From the available knowledge measures, RTI recommended the four-item quiz and questions on perceived knowledge as baseline knowledge measures in tracking the progress of the education campaign. All of these knowledge measures have limitations, but these two were identified as having sufficient

internal consistency, reliability, and construct validity to warrant use as baseline measures. In general, persons who were socioeconomically disadvantaged, had health limitations, had Medicaid coverage, and did not use any services scored lower on these knowledge indices in the 1996 MCBS.

The purpose of the Phase 2 study was to monitor progress toward achieving each of the four education campaign goals using questions drawn from Rounds 23 and 24 of the 1998 MCBS Access to Care files (Anderson et al., 2000). We used descriptive and multivariate analyses to determine if Medicare materials were promoting education campaign goals. The analysis examined the marginal effect of reading the *1999 Medicare & You Handbook* in the five states in which it was fielded during 1998 (Arizona, Florida, Ohio, Oregon, and Washington). In each of the campaign goal areas that we examined using regression analyses, most questions showed that reading the Handbook made a positive contribution compared with not reading the Handbook. In the five states, reading the Handbook had modest percentage point gains for the education campaign goal of impact/use, because beneficiaries used it to find or review information on health plan choices. Beneficiaries who read the Handbook also demonstrated heightened awareness of managed care arrangements and buy-in programs. Rounds 23 and 24 of the MCBS were found to be generally of benefit for evaluating the education campaign, but the authors concluded that more survey questions were needed to better measure the four beneficiary education campaign goals for comprehensive monitoring.

Phase 2 findings suggest the importance of ongoing development, testing, and refinements of knowledge questions as an important way to measure beneficiary knowledge and limit the impact of social desirability in responses. A larger set of questions with similar psychometric properties and substantive content will need to be administered over time to assess the longer range effects of the education campaign and to avoid administering the same set of questions to the same beneficiaries year after year.

1.2.2 Goals for Phase 3

This phase of the project continues the evaluation of the impact of various components of the Medicare education campaign, using data from the MCBS, and builds on the findings and analysis methodology developed through RTI's earlier work for CMS in Phases 1 and 2. The 2-year Phase 3 analysis will present results based on multiple years of MCBS survey data: 1995 through 1999 in the first year (Phase 3.1, presented in this report). To these data, we will add the analysis of 2000 MCBS data in the second year (under Phase 3.2). In particular, these rounds of MCBS data allow for analysis of beneficiary outcomes before and after the first and second national distributions of the *Medicare & You*

Handbook in 1999 and 2000, respectively, after the Internet web site became available in 1998, and after the 1-800-Medicar(e) number became available nationwide in 1999.

The broad, policy-oriented questions of the Medicare education campaign that were examined in earlier phases of this study and are continued in Phase 3 include the following:

- Do beneficiaries receive (have *access* to) information and is this access increasing over time?
- Are beneficiaries *aware* of Medicare's features and options and is this awareness increasing over time?
- Do beneficiaries *understand* the information they receive, can they use it for making informed choices about their Medicare participation if they so desire, and is this level of understanding increasing over time?
- Are beneficiaries *using* the information to make choices and is their use increasing over time?

This report is the second of two reports presenting Phase 3.1 findings. In this report, we use 1999 MCBS data to conduct cross-sectional (or point in time) analyses examining differences in characteristics of the population specifically relating to using the *Medicare & You 2000* Handbook and other education campaign materials. Then, using multiple years of MCBS data, we conduct descriptive trend analyses looking at changes in beneficiary knowledge and behavior over time. A longitudinal analysis measuring changes in individual beneficiary outcomes before and after distribution of the *Medicare & You* Handbook will be conducted during Phase 3.2 of the project.

In a companion report, *Development and Psychometric Evaluation of Medicare Beneficiary Knowledge Indices from the Medicare Current Beneficiary Survey* (Bann and Berkman, 2002), we developed and evaluated three potential knowledge indices using data from the 1998 and 1999 MCBS surveys. One was a perceived knowledge index that included five questions and asked beneficiaries to subjectively rate how much they knew about a particular topic related to Medicare. The other two measures were three-item and seven-item quizzes that required beneficiaries to respond to sets of true/false questions. Trends in these indices are presented in this report.

2.0 The MCBS as a Source of Data for Evaluating the Medicare Beneficiary Education Campaign

This analysis is intended to provide the best answers to our research questions through data available from the MCBS. The MCBS is valuable for this purpose because it has been conducted repeatedly, spanning the time period before the introduction of the Medicare education campaign in 1998, through the national distributions of the *Medicare & You* Handbook, and beyond. The data for this analysis come from the Access to Care files and selected Supplemental files from the 1995 to 2000 MCBS surveys. (See *Exhibit 1* for a timeline of the rounds of the MCBS we used in our analysis and the distribution dates of the *Medicare & You* Handbook.)

Each annual installment of the MCBS consists of three rounds of interviews with respondents. The first round occurs between September and December of the calendar year, and the subsequent two rounds are conducted in the following year between January and April and between May and August.

The MCBS is a rotating panel design in which a large national probability sample of approximately 12,000 Medicare beneficiaries are interviewed every 4 months for up to 4 years. Very old and disabled beneficiaries under age 65 are oversampled for some rounds of the survey, as are beneficiaries enrolled in Medicare HMOs in some years. Each year, approximately a third of the sample is rotated out of the survey and replaced with new members, so that each annual MCBS data set represents a cross-section of the Medicare population enrolled in the program continuously since January 1 of that year, as well as members of a longitudinal beneficiary panel.

Because this study focuses on the impact of the Medicare education campaign activities on beneficiary knowledge of Medicare, the degree to which the MCBS provides data on knowledge of education campaign interventions and their content is a central issue of the research design and interpretation. The interventions of immediate interest include the *Medicare & You* Handbook (distributed nationally in fall 1999 and again in fall 2000), the Medicare beneficiary web site (www.medicare.gov), and the toll-free Medicare hot-line [1-800-Medicar(e)]; the latter two were initially implemented in 1998. Because the MCBS was conducted for a number of years before these educational activities were first implemented and will continue to be conducted periodically in the future, it offers the opportunity to make comparisons over time. The MCBS makes it possible to track national trends in (1) beneficiary knowledge and sources of information about Medicare through the periods before and after the education campaign activities were implemented, and (2) beneficiaries' successes and preferences in using a variety of sources of information to stay informed about changes in the Medicare program.

Exhibit 1. Structure of the Phase 3 Analysis in Relation to the NMEP and MCBS Timelines

| | Winter 1995– 1996 | Winter 1996– 1997 | Spring 1997 | Winter 1997– 1998 | Fall 1998 | Winter 1998– 1999 | Spring 1999 | Fall 1999 | Winter 1999– 2000 | Spring 2000 | Fall 2000 | Winter 2000– 2001 | Spring 2001 |
|-------------------------|-------------------------|-------------------------|----------------|-------------------------|--|---------------------------|----------------|---|---------------------------|----------------|---|---------------------------|----------------|
| MCBS Year | 1995 MCBS | 1996 MCBS | | 1997 MCBS | | 1998 MCBS ¹ | | | 1999 MCBS ² | | | 2000 MCBS ³ | |
| MCBS Round Number | 14 PR | 17 PR | 18 OL | 20 PR | | 23 BK | 24 BN | | 26 BK | 27 BN | | 29 BK | 30 BN |
| NMEP Event | | | | | 1999 Handbook distributed in five states. Bulletin distributed in all other states. | | | 2000 Handbook distributed in all 50 states. | | | 2001 Handbook distributed in all 50 states. | | |

Note: NMEP = National Medicare Education Program; MCBS = Medicare Current Beneficiary Survey.

¹ Included questions referring to the *1999 Medicare & You Handbook/Bulletin*.

² Included questions referring to the *Medicare & You 2000 Handbook*.

³ Included questions referring to the *Medicare & You 2001 Handbook*.

The extent to which the MCBS supplies data about these education campaign interventions varies over time. A general question measuring beneficiary satisfaction with the availability of information was asked in the MCBS from 1995 to 1999. Questions regarding a beneficiary's *need* for information appeared in the 1995 to 1997 MCBS, and similar questions concerning trying to *find* information were continued in the MCBS in 1998 and 1999. Questions concerning the *Medicare & You* Handbook and other education campaign materials were asked of all beneficiaries for the first time in the 1999 MCBS, following their availability nationally. Therefore, comparisons across all or some of the years for which we have data are limited by question availability.

Another limitation of the MCBS is that some questions were not asked of the entire sample in every year. An example is the series of questions that measures beneficiary knowledge. In the MCBS surveys between 1995 and 1998 these items were asked of all sample respondents, but in 1999 they were only asked of respondents new to the MCBS sample. They were again asked of everyone in the sample during the 2000 MCBS. Therefore, while trend analysis of the beneficiary knowledge items is possible, a longitudinal analysis must wait until the 2000 MCBS data are available and can be compared to the 1998 and earlier MCBS surveys.

3.0 Analytic Design

3.1 Overview

This analysis takes two different approaches to evaluate progress toward achieving the four Medicare education campaign goals of increasing access, awareness, understanding, and impact/use of Medicare information. The first approach is cross-sectional and presents the distributions of beneficiaries achieving desired outcomes at the time of the 1999 MCBS survey after the first national distribution of the *Medicare & You 2000* Handbook, as well as the relationship between achieving these outcomes and differences in beneficiary characteristics. For selected items in which data were available, we present comparable outcomes at the time of the 1998 MCBS survey. The second approach examines trends over time in beneficiary information-seeking behavior, beginning in the period before the implementation of the education campaign through 1999, the most recent year for which data are available. Results for each of these analytic approaches are grouped according to the Medicare education campaign goals.

3.2 Cross-Sectional Differences in the Population

The cross-sectional analysis focuses on research questions specifically related to the education campaign materials. Descriptive charts and multivariate results are presented for the 1999 MCBS. These questions were only asked nationally since the first national distribution of the Handbook. Where comparable data were available, descriptive charts presenting results for the 1998 MCBS are provided as well. These questions were asked after the *1999 Medicare & You* Handbook was distributed in five pilot states and a smaller bulletin was distributed in all other areas. All analyses were conducted using SAS and SUDAAN software to account for the sample design. Survey weights were applied specific to survey rounds from which beneficiary knowledge and needs items were used. Because only new MCBS survey respondents were asked the education campaign-related questions in the 1999 MCBS, the sample size was smaller than it has been in cross-sectional analyses conducted in prior phases of this project where the entire MCBS sample was included.

The multivariate model used to analyze differences in outcomes relating to beneficiary characteristics has the following form:

Outcome = f (Beneficiary demographic characteristics, health status, insurance coverage beyond traditional Medicare, current year expenditures, and exposure to cable TV and the Internet)

All outcomes were modeled using dichotomous, multinomial, or ordered logistic regression equations. Dichotomous logistic models compare responses of “yes” relative to “no.” “Don’t know” responses were not combined with “no” responses because we do not consider the two answers to be synonymous. In only one instance, the analysis of responses to a question concerning receipt of the Handbook (BK28), was there a sufficient number of “don’t know” responses to include them as a separate category in a multinomial logistic regression model. Otherwise, the numbers of beneficiary “don’t know” responses were negligible, and they were dropped from the analysis. Differences are reported as statistically significant when they reached the $p < 0.05$ level or lower.

The independent variables used in our analysis are generally the same as those identified during the Phase 2 analysis and include beneficiary characteristics for which achievement of Medicare beneficiary education campaign goals may vary. *Exhibit 2* presents beneficiary characteristics, the manner in which they were measured in the analysis, and their weighted distribution in the noninstitutionalized Medicare beneficiary population as estimated from the 1999 MCBS.

Demographic characteristics include age, gender, race, educational attainment, and marital status. We consider differences related to the physical health and cognitive status of the beneficiaries through variables measuring self-reported health status, whether individuals were able to respond to the survey by themselves, and whether individuals made their own healthcare decisions. We also include whether beneficiaries had additional coverage beyond traditional Medicare; whether they were enrolled in a managed care plan; and whether they obtained supplemental coverage through an employer, private purchase, Medicaid, or public coverage other than Medicaid or had none of these forms of supplemental coverage.

Beneficiaries were categorized according to levels of medical service use as measured by their Medicare claims charges in the current year, recognizing that those respondents participating in Medicare + Choice plans would generally not have claims with charges. Beneficiaries were also classified according to the types of media available to them that might provide access to information about Medicare, including whether they had cable TV in their home or access to the Internet.

As can be seen in Exhibit 2, among the noninstitutionalized Medicare population, most beneficiaries were 65 years of age or older, and only 13 percent were younger and eligible on the basis of disability. Just over half of beneficiaries were women (56 percent), while more than three-quarters were white (80 percent). Two-thirds had at least a high school diploma, but 16 percent had less than a ninth grade education. Slightly more than half (54 percent) were married, and 29 percent were widowed.

Exhibit 2. Beneficiary Characteristics Used in Multivariate Models as Independent Variables

| Characteristic | Levels of the Characteristic | Weighted Percent |
|---|---|--|
| Age | <ul style="list-style-type: none"> Less than 65 65 to 75 Over age 75 (reference) | <ul style="list-style-type: none"> 12.5% 51.1% 36.5% |
| Gender | <ul style="list-style-type: none"> Female (reference) Male | <ul style="list-style-type: none"> 56.1% 43.9% |
| Race | <ul style="list-style-type: none"> White Nonwhite (reference) | <ul style="list-style-type: none"> 80.2% 19.8% |
| Educational attainment | <ul style="list-style-type: none"> Less than ninth grade Some high school High school graduate (reference) Greater than high school | <ul style="list-style-type: none"> 16.4% 17.6% 29.3% 36.7% |
| Marital status | <ul style="list-style-type: none"> Married (reference) Widowed Separated/divorced Never married | <ul style="list-style-type: none"> 53.9% 29.0% 10.7% 6.3% |
| Self-reported health status | <ul style="list-style-type: none"> Excellent/very good health Good health Fair/poor health (reference) | <ul style="list-style-type: none"> 41.0% 30.5% 28.5% |
| Survey respondent | <ul style="list-style-type: none"> Self Proxy (reference) | <ul style="list-style-type: none"> 91.5% 8.5% |
| Healthcare decision making | <ul style="list-style-type: none"> Made own healthcare decisions Received help making healthcare decisions or someone else made healthcare decisions (reference) | <ul style="list-style-type: none"> 69.3% 30.7% |
| Managed care enrollee | <ul style="list-style-type: none"> Enrolled in Medicare managed care plan or other HMO at any time during the year Not enrolled in any managed care at any time during the year (reference) | <ul style="list-style-type: none"> 29.0% 71.0% |
| Employer-sponsored coverage | <ul style="list-style-type: none"> Had employer-sponsored coverage at any time during the year Did not have employer-sponsored coverage at any time during the year (reference) | <ul style="list-style-type: none"> 30.8% 69.2% |
| Medigap or privately purchased coverage | <ul style="list-style-type: none"> Had Medigap or other privately purchased coverage at any time during the year Did not have Medigap or other privately purchased coverage at any time during the year (reference) | <ul style="list-style-type: none"> 46.6% 53.5% |
| Medicaid coverage | <ul style="list-style-type: none"> Had Medicaid coverage at any time during the year Did not have Medicaid coverage at any time during the year (reference) | <ul style="list-style-type: none"> 12.0% 88.0% |

(continued)

Exhibit 2. (continued)

| Characteristic | Levels of the Characteristic | Weighted Percent |
|---|---|---|
| Other public coverage | <ul style="list-style-type: none"> ▪ Had other public coverage at any time during the year ▪ Did not have other public coverage at any time during the year (reference) | <ul style="list-style-type: none"> ▪ 3.3% ▪ 96.7% |
| No supplemental coverage | <ul style="list-style-type: none"> ▪ Had no supplemental coverage beyond Medicare at any time during the year ▪ Had supplemental coverage at any time during the year (reference) | <ul style="list-style-type: none"> ▪ 11.6% ▪ 88.4% |
| Cable TV | <ul style="list-style-type: none"> ▪ Had cable TV ▪ Did not have cable TV (reference) | <ul style="list-style-type: none"> ▪ 75.2% ▪ 24.9% |
| Internet access | <ul style="list-style-type: none"> ▪ Had Internet access ▪ Did not have Internet access (reference) | <ul style="list-style-type: none"> ▪ 29.2% ▪ 70.8% |
| Level of Medicare charges in the current year | <ul style="list-style-type: none"> ▪ \$0 ▪ \$1 to \$600 ▪ Greater than \$600 to \$2,000 ▪ Greater than \$2,000 to \$7,500 ▪ Greater than \$7,500 (reference) | <ul style="list-style-type: none"> ▪ 31.3% ▪ 18.3% ▪ 17.8% ▪ 16.3% ▪ 16.3% |

Note: Data from analysis of the 1999 MCBS noninstitutionalized sample (n=4,347).

Beneficiary self-reported health status varied greatly. While 41 percent reported being in excellent or very good health, 29 percent said they were in fair or poor health. Almost all survey respondents were able to answer the survey on their own (92 percent), but somewhat fewer (69 percent) said they made their own healthcare decisions without any help.

Only 29 percent of beneficiaries reported being enrolled in some form of managed care during the year, regardless of whether it was obtained through an employer, privately, or through public coverage. On the other hand, all but 12 percent of Medicare beneficiaries reported having one or more forms of supplemental coverage during the year, either concurrently or consecutively. Thirty-one percent had employer-sponsored benefits, 47 percent had Medigap or other privately purchased coverage or a Medicare + Choice plan, 12 percent had Medicaid coverage, and 3 percent had public coverage other than through the Medicaid program.

Three-quarters of beneficiaries had access to information through cable TV; however, only slightly more than one-quarter (29 percent) reported having access to the Internet. While almost one-third (31 percent) of noninstitutionalized beneficiaries had no charges reported in Medicare claims during the survey year, 18 percent had total charges of up to \$600, and one-third had charges of \$2,000 or more. Of this latter group, half had charges in excess of \$7,500.

3.3 Trends Over Time

Our trend analysis examines changes in selected outcomes in the Medicare population over time. This portion of the study is descriptive and includes questions that have been repeated for multiple years of the survey, including from before the implementation of the education campaign as well as one year after its national implementation.

Due to MCBS survey item wording changes over time, the analysis of questions pertaining to access to information measures trends in the percentage of beneficiaries who *needed* to find out about five specific aspects of the program from the 1995 to 1997 surveys, followed by the percentage of beneficiaries who *tried* to find out about the same specific aspects of the program in the 1998 and 1999 surveys. We also present trends in whether beneficiaries *needed to or tried to* find out about any of these five specific aspects of Medicare and identify the most common sources used for obtaining information on any of these items.

Because no MCBS items are available to represent the awareness goal domain over time, achievement of that goal is not included in this portion of the analysis. For the understanding goal domain, we measure changes in the mean index scores on two knowledge indices and a perceived knowledge index. Due to changes in MCBS questions over time, trends in comparable indices can only be shown for 1998 and 1999 MCBS data.

A concern when using data from a rotating panel design for trend analyses is that the samples from one year to the next are not completely independent because some respondents remain in the survey during that time period. When conducting tests of the significance of changes over time, we accounted for the panel nature of the data following the recommendations of O'Connell, Chu, and Bailey (1997). They suggest using the balanced repeated replications (BRR) method for calculating standard errors. We did not have to correct for differences between MCBS respondents in 1999 and the other years because all respondents in 1999 were new to the survey. T-tests and Wald chi-square tests were used to detect differences in outcomes of interest over time. Tests of differences were conducted, and those that reached the $p = .01$ level or lower were considered significant. We adopted the $p < .01$ level rather than $p < .05$ to take into account the large MCBS sample sizes available for all survey years (except 1999) and the resulting tendency for very small differences to test as significant. Survey weights were incorporated into the analyses so that the results would be representative of the Medicare population.

4.0 Results

Presented below are the results of the cross-sectional analysis involving the education campaign materials, followed by the analysis of trends over time in achieving the Medicare beneficiary education campaign goals.

4.1 Cross-Sectional Results

Separately for each education campaign goal area, we list the survey questions analyzed and present the results from both descriptive and multivariate analyses. We discuss frequency distributions and corresponding multivariate results in narrative form and display the results in *Appendix A*.

4.1.1 Access

We analyzed three MCBS items representing the education campaign goal of increasing access to educational materials. The research question and the related MCBS survey items are presented in *Exhibit 3*.

Exhibit 3. Access Research Question and Related MCBS Survey Questions Used for the Cross-Sectional Analysis

| Research Question | MCBS Survey Questions |
|---|--|
| Do beneficiaries receive (have access to) information made available through the Medicare education campaign? | BK28. Did you receive a copy of this book, called the <i>Medicare & You Handbook</i> ? BK29. Who sent you this book? BK40. Do you still have the book? |

We found that over half of beneficiaries said they received a copy of the *Medicare & You 2000 Handbook* (58 percent), a third said they did not receive it, and 7 percent said they did not know whether they received it (Exhibit A1). Of those who said they received the Handbook, approximately half (55 percent) knew that it came from HCFA (the Agency's name at the time of the survey) or the people who run Medicare, while 17 percent thought that it came from a variety of other sources including the Department of Health and Human Services and the Social Security Administration (Exhibit A2). More than one-quarter of beneficiaries (28 percent) who said they received the Handbook did not know who had sent it. Virtually all beneficiaries who said they received the Handbook said they still had a copy (94 percent) (Exhibit A3). These results suggest that some beneficiaries did not remember receiving the Handbook or may not have received it. Of those beneficiaries who did remember, most were familiar

with the Handbook and valued it to the extent that they kept it as a resource. A far smaller percentage of beneficiaries knew who provided the Handbook.

Beneficiary access to information improved between the period following the distribution of the *1999 Medicare & You Handbook/Bulletin* and the *Medicare & You 2000 Handbook* (Exhibits A1 to A3). A larger percentage of beneficiaries said they received the 2000 Handbook (58 percent compared with 36 percent), knew that the book was sent by HCFA or the people who run Medicare (55 percent compared with 47 percent), and still had a copy of the book (94 percent compared with 75 percent).

A multinomial logistic regression analysis was performed to measure which beneficiary characteristics were significantly related to reports of whether or not they had received the Handbook. A three-category dependent variable was constructed using the responses “yes,” “no,” and “don’t know,” with the “yes” category used as the reference category for comparisons with each of the remaining two categories. We report both of these comparisons for this three-category dependent variable—whether a respondent said he or she had not received a copy of the Handbook versus saying one had been received, and not knowing whether he or she had received one versus saying it had been received (Exhibit A4). For ease of discussion below, we present the reverse, yet equivalent, comparisons of whether a beneficiary said he or she had received a copy of the Handbook versus not receiving a copy and whether a beneficiary said he or she had received a copy of the Handbook versus not knowing.

Results show that beneficiaries 65 to 75 years of age were significantly more likely than older beneficiaries to say they had received a copy of the Handbook, while beneficiaries less than 75 years of age were significantly more likely than those older than age 75 to say they knew whether they received the Handbook compared to not knowing.

Reasonably similar results occurred for those persons who were in more of a position to be using the Handbook information—respondents who said they answered the survey themselves and those who said they made their own healthcare decisions. Those who responded to the survey themselves and those who made their own healthcare decisions were significantly more likely to say they had received the Handbook than not, but only those who made their own healthcare decisions were also significantly more likely to say they received the Handbook than did not know whether they received it.

Less educated beneficiaries (those completing less than a high school education) were less likely than high school graduates to say they received the Handbook. Also, respondents with only some high school education, as well as those with more than a high school diploma, were less likely than high school graduates to say they received the Handbook than did not know whether they had received it.

We also estimated a logistic regression model measuring differences between those who reported that they still had the Handbook and those who said they did not, and none of the respondent characteristics in the model was significant (Exhibit A4).

4.1.2 Awareness

Beneficiary awareness of Medicare education campaign materials is measured through MCBS items asking about awareness of the Medicare toll-free telephone number and ever having visited the official Medicare web site (*Exhibit 4*). Our analysis of awareness with the web site was limited to the 29 percent of beneficiaries who said they had access to the Internet.

Exhibit 4. Awareness Research Question and Related MCBS Survey Questions Used for the Cross-Sectional Analysis

| Research Question | MCBS Survey Question |
|--|---|
| Are beneficiaries aware of the educational materials available through the Medicare program? | BK54a. Before today, were you aware of the 1-800-Medicar(e) toll-free number? BN28a. Have you ever visited the official web site for Medicare information www.Medicare.gov ? |

A smaller percentage of beneficiaries reported being aware of the toll-free phone line (47 percent) (Exhibit A5) than said they had received the Handbook (58 percent). Of the approximately 20 percent of beneficiaries who had ever used the Internet, most (87 percent) had never visited the Medicare web site (Exhibit A6).

Results of logistic regression models estimating the relationship between beneficiary characteristics and each of these two outcomes are found in Exhibit A7. Those less likely to be aware of the toll-free number included beneficiaries with the lowest level of educational attainment (less than ninth grade relative to a high school degree), those who were separated or divorced (relative to married), those enrolled in managed care, and those with no charges for medical care in the current year. Those more likely to be aware of the telephone number were beneficiaries who made their own medical decisions.

The regression model indicates that the Medicare web site was more likely to have been visited by disabled beneficiaries less than 65 years of age and men. In contrast, white beneficiaries, those with Medicaid coverage, and those with between \$2,000 and \$7,500 in Medicare charges were less likely to have visited the web site. The difference we found by race was unexpected and can be explained by differences in the characteristics of beneficiaries who used the Internet compared with those in the

population as a whole. Nonwhite respondents were significantly less likely to make their own healthcare decisions without help from others, more likely to have some form of supplemental coverage, and less likely to have any charges; the two groups did not differ in terms of age, sex, educational attainment, marital status, or health status.

4.1.3 Understanding

Only one MCBS survey item seeks to measure beneficiary knowledge and understanding of the education campaign materials. It focuses on the ease of understanding the Handbook (*Exhibit 5*). Eighty-six percent of beneficiaries who said they received the Handbook found it at least somewhat easy to understand (*Exhibit A8*). A similar percentage of beneficiaries had found the 1999 Handbook/Bulletin at least somewhat easy to understand in the previous year.

Exhibit 5. Knowledge/Understanding Research Question and Related MCBS Survey Question Used for the Cross-Sectional Analysis

| Research Question | MCBS Survey Question |
|--|---|
| Do beneficiaries find the Handbook easy to understand? | BK33. How easy did you find the book to understand? |

We modeled beneficiary responses regarding their ease of understanding the Handbook using ordered logistic regression, where the outcome being measured corresponds to increasing levels of ease in understanding the Handbook. Results from this model (*Exhibit A9*) reveal that those with the least amount of education (less than ninth grade) found the Handbook significantly more difficult to understand than those with a high school diploma. Respondents who found the Handbook more easy to understand were those in better health, those who made their own healthcare decisions, those enrolled in managed care, those with employer-sponsored supplemental health benefits, and those who had access to the Internet.

4.1.4 Impact/Use

The impact and use of Medicare beneficiary education campaign materials is measured through three survey questions about the Handbook: reading it, using it to look up a telephone number, or using it to find out information about a health plan (*Exhibit 6*).

Exhibit 6. Impact/Use Research Question and Related MCBS Survey Questions Used for the Cross-Sectional Analysis

| Research Question | MCBS Survey Questions |
|------------------------------------|--|
| Do beneficiaries use the Handbook? | <p>BK30. Would you say that you have read this book thoroughly, parts of it, or that you haven't read it at all?</p> <p>BK31. Have you ever used this book to look up a telephone number?</p> <p>BK32. Have you ever used this book to find information about health plan options available to you, such as Medicare managed care plans, HMO, or supplemental plans?</p> |

As was found previously by Harris-Kojetin et al. (2001), among beneficiaries who said they received the 2000 Handbook, the majority considered it reference material. Only 10 percent reported reading it thoroughly, while more than half said they read part of it (57 percent) and one-third (34 percent) had not read it at all (Exhibit A10). Most had not used the Handbook to look up a telephone number (93 percent) (Exhibit A11), and only 11 percent had used it to find out information about health plan options, such as Medicare managed care plans (Exhibit A12).

Changes in beneficiary use of the 2000 Handbook were mixed in comparison to their use of the 1999 Handbook/Bulletin (Exhibits A10 to A12). The percentage of beneficiaries who had read at least part of the written materials declined by 10 percent (from 73 percent to 67 percent), while the percentage who read the material thoroughly declined by approximately 50 percent. The percentage of beneficiaries who used the materials to look up a telephone number increased from 4 percent to 8 percent, and the percentage who used the materials to find out about health plan options increased from 8 percent to 11 percent.

An ordered logistic regression model was estimated to measure how thoroughly the 2000 Handbook was read, with the three levels of the dependent variable representing increased reading of the Handbook (not read at all, read part of it, and read it thoroughly). Also, logistic regression models with dichotomous outcomes of "yes" versus "no" were used to model characteristics associated with whether the Handbook had been used to look up a telephone number and used to find out about health plan options (Exhibit A13). We found that beneficiaries less than 65 years of age were significantly more likely than those older than age 75 to have read more of the book and to have used the book to find out about their health plan options. Beneficiaries who did not complete high school were less likely to have read the

Handbook as thoroughly as those with a high school diploma, and the same was true of those who were separated, divorced, or never married compared with those who were married. Widowed beneficiaries were also less likely than married beneficiaries to have used the Handbook to get a telephone number. In contrast, those who made their own healthcare decisions were significantly more likely to have read the Handbook thoroughly. Beneficiaries with access to the Internet were more likely to have used the Handbook to look up a telephone number, while those with cable TV were less likely to have used it to find out about their health plan options.

4.2 Trend Analysis

Trends in questions corresponding to Medicare beneficiary education campaign goals were analyzed. The results, including significant changes in rates across years 1995 to 1999, are presented in this section of the report. *Appendix B* contains exhibits displaying changes over time.

4.2.1 Access

Our analysis of trends in information that beneficiaries tried to access spans the period covered by the 1995 to 1999 MCBS surveys (*Exhibit 7*). During that time, while the same five topic areas remained available for analysis, the wording of the question changed from whether beneficiaries thought they *needed* to find out information about each topic (1995 to 1997) to whether they *tried* to find out information (1998 and 1999) about those topics. For each topic area, trends throughout the 1995 to 1999 period are presented in one chart but are clearly distinguished between the two time periods. However, differences between years are only compared between 1995 through 1997, and 1998 and 1999. It should be noted that the first national distribution of the *Medicare & You 2000* Handbook occurred between the 1998 and 1999 MCBS survey rounds in which these questions were asked. We also present the top five sources beneficiaries used to obtain information on any of these topics.

A small percentage of beneficiaries said they *needed* to find out information about new benefits or changes in the Medicare program between 1995 and 1997 (*Exhibit B1*). However, the decline from 5.5 percent in 1995 to 4.3 percent in 1996 and 4.6 percent in 1997 was significant. On the other hand, the percentage of beneficiaries who said they *tried* to find out about these topics increased significantly from 4.9 percent to 6.4 percent of beneficiaries between 1998 and 1999. It was between these two most recent points in time that the *Medicare & You* Handbook was distributed nationally.

Exhibit 7. Access Research Question and Related MCBS Survey Questions Used for the Trend Analysis

| Research Question | MCBS Survey Questions | MCBS Survey Years Included |
|--|--|--|
| Have the topics of information that beneficiaries try to access changed over time? | <p>In the past year, have you <i>needed</i> to find out information on each of five topic areas:</p> <ul style="list-style-type: none"> ▪ PR2a. New benefits or changes in the Medicare program? ▪ PR8. What medical services Medicare covers and does not cover? ▪ PR16a. The availability and benefits of Medicare managed care plans such as HMOs? ▪ PR11. What your Medigap or supplemental insurance policy covers? ▪ PR14. How much you needed to pay for a particular medical service? <p>In the past year, have you <i>tried</i> to find out information on each of five topic areas:</p> <ul style="list-style-type: none"> ▪ BK7. New benefits or changes in the Medicare program? ▪ BK11. What medical services Medicare covers and does not cover? ▪ BK15. The availability and benefits of Medicare managed care plans such as HMOs? ▪ BK19. What your Medigap or supplemental insurance policy covers? ▪ BK3. How much you needed to pay for a particular medical service? | <p>1995–1997</p> <p>1998–1999</p> |
| Have the sources of information used by beneficiaries changed over time? | As a group, what are the most common sources of information used to find out about these five topic areas? | 1995–1999 |

In each year, slightly more beneficiaries said they either needed to or tried to find information about what medical services Medicare does and does not cover compared with needing or trying to find information about new benefits or changes in the Medicare program (Exhibit B2). The trends, however, were similar. The percentage of beneficiaries who said they *needed* to find information significantly declined to 5.3 percent and 5.5 percent in 1996 and 1997, respectively, from a high of 6.4 percent in 1995. The trend was reversed, however, in 1998 and 1999, with the percentage of beneficiaries who *tried* to find out information on covered services significantly increasing from 7.4 percent to 10.2 percent between those years.

We also looked at trends in the percentage of beneficiaries who *needed to* or *tried to* find out information on the availability and benefits of Medicare managed care plans such as HMOs (Exhibit B3).

A significantly larger percentage of beneficiaries said they *needed* to find out information on Medicare managed care plans between 1995 and 1996 (4.6 percent and 6.2 percent, respectively), as well as between 1995 and 1997 (4.6 percent and 5.7 percent, respectively). Between 1998 and 1999, the percentage of beneficiaries who *tried* to find out information increased from 6.1 percent to 7.1 percent, but this difference was not significant.

Less fluctuation was found in trends of Medicare beneficiary information-seeking behavior concerning what Medigap or supplemental insurance policies cover (Exhibit B4). The percentage of beneficiaries who said they *needed* to find out this information significantly declined from 8.0 percent to 6.7 percent between 1995 and 1996, but rose again to 7.6 percent in 1997. Differences over time in the percentage of those who *tried* to find out what Medigap covers between 1998 and 1999, 11.6 percent and 12.5 percent, respectively, were not significant.

The percentage of beneficiaries who said they *needed* to find information about how much they needed to pay for a particular service was small between 1995 and 1997, between 3.1 percent and 3.5 percent (Exhibit B5). In contrast, in 1998 the percentage of those who said they *tried* to find out information on costs was 5.8 percent, and this figure rose significantly to 8.5 percent in 1999.

We also measured trends over time in whether beneficiaries said they *needed* to or *tried* to find out information about any of these five topics (Exhibit B6). Rates in the percentage of beneficiaries who *needed* to find out any information declined significantly between 1995 (18.6 percent) and 1996 (17.0 percent) and 1997 (17.4 percent). In 1998, 22 percent of beneficiaries *tried* to find out information on at least one of these five topics, and that number increased significantly to 26 percent in 1999. This increase coincided with the distribution of the *Medicare & You* Handbook.

The top five sources that beneficiaries used to find out information on any of these five topics did not appear to change substantially over time (Exhibit B7). Beneficiaries' responses do not add to 100 percent since they could have answered multiple sources for any or all of the topics. The beneficiaries' Medigap or supplemental insurance company remained the most frequently mentioned source of information across the entire period 1995 to 1999, and obtaining information from their doctor and their HMO was common throughout the 5-year period as well. A beneficiary's Medicare office, including the telephone help line, was frequently mentioned at the time of the 1998 MCBS, and 18 percent of beneficiaries used Medicare publications at the time of the 1999 MCBS. Unlike the previous year, by the time of the 1998 MCBS, a beneficiary not being able to find information on a topic of interest was no longer one of the top five responses.

4.2.2 Awareness

There are no MCBS survey questions that could be trended over time to examine changes in the awareness of beneficiaries.

4.2.3 Understanding

Trends in understanding or knowledge of the Medicare program are shown only for the 2-year period of 1998 and 1999. During these 2 years, the same MCBS survey items were combined to form indices measuring the level of beneficiary knowledge (*Exhibit 8*). The development and evaluation of these indices has been discussed in a previous research note by Bann and Berkman (2002). Trends in the surveys during the 2-year period (*Exhibit B8*) show that beneficiary scores were almost exactly the same in each of the 2 years.

4.2.4 Impact/Use

We examined changes over time in the impact of the Medicare beneficiary education campaign by looking at trends in satisfaction measures over time. Included is a general measure of satisfaction with the availability of information and whether beneficiaries believed their questions were answered by the information they received on three topics (*Exhibit 9*).

Beneficiaries rated their general level of satisfaction with the availability of information between 1995 and 1999. The percentage who were satisfied or very satisfied was very high throughout the period, significantly increasing from a low of 77 percent in 1995 to over 80 percent between 1996 and 1998 before significantly declining to 79 percent in 1999 (*Exhibit B9*). The decline in the level of satisfaction in 1999 is driven partially by small increases over time in the percentage of beneficiaries who were very unsatisfied or unsatisfied but also by an upward trend in the percentage of beneficiaries who said they did not know their level of satisfaction—15 percent in 1999 compared with 12 percent in 1997 and 1998.

Exhibit 8. Knowledge/Understanding Research Question and Related MCBS Survey Questions Used for the Trend Analysis

| Research Question | MCBS Survey Questions | MCBS Survey Years Included |
|--|--|----------------------------|
| Has beneficiaries' actual and perceived knowledge of the Medicare program changed over time? | <p><i>Three-item true or false quiz concerning preventive services:</i></p> <p>BN16. Medicare covers colorectal cancer screening.</p> <p>BN18. Medigap or supplemental insurance is the same as a Medicare managed care plan.</p> <p>BN19. Medicare covers an annual flu shot.</p> | 1998–1999 |
| | <p><i>Seven-item true or false knowledge quiz:</i></p> <p>BK 43. Most people covered by Medicare can select among different kinds of health plan options within Medicare.</p> <p>BK44. Medicare without a supplemental insurance policy pays for all of your healthcare expenses.</p> <p>BK46. The Medicare program has begun to offer more information and help in order to answer your Medicare questions.</p> <p>BK47. People can report complaints to Medicare about their Medicare managed care plans (HMOs) or supplemental plans if they are not satisfied with them.</p> <p>BK48. If someone joins a Medicare managed care plan (HMO) that covers people on Medicare, they have limited choices about what doctors they can see.</p> <p>BK49. If someone joins a Medicare managed care plan (HMO) that covers people on Medicare, they can change or drop the plan and still be covered by Medicare.</p> <p>BK50. Medicare managed care plans (HMOs) that cover people on Medicare often cover more health services, like prescribed medicines, than Medicare without a supplemental policy.</p> | 1998–1999 |
| | <p><i>Self-reported (perceived) knowledge index:</i></p> <p>BN1. How much do you feel you know about what medical services Medicare covers or does not cover?</p> <p>BN2. How much do you feel you know about how much you have to pay for medical services?</p> <p>BN3. How much do you feel you know about supplemental or Medigap insurance, such as what it covers or how it works with Medicare to pay medical claims?</p> <p>BN4. How much do you feel you know about the availability and benefits of Medicare managed care plans?</p> <p>BN5. How much do you feel you know about choosing or finding a doctor or other healthcare provider?</p> | 1998–1999 |

Exhibit 9. Impact/Use Research Question and Related MCBS Survey Questions Used for the Trend Analysis

| Research Question | MCBS Survey Questions | MCBS Survey Years Included |
|--|---|----------------------------|
| Has beneficiary satisfaction with the availability and content of information changed over time? | PR1a/BK2/BK27aa. How satisfied are you in general with the availability of information about the Medicare program when you need it? | 1995–1999 |
| | Were your questions answered by the information you received about: | |
| | ▪ PR4/BK10. New benefits or changes in the Medicare program? | 1995–1999 |
| | ▪ PR16c/BK18. The availability and benefits of Medicare managed care plans such as HMOs? | 1995–1999 |
| | ▪ PR13/BK22. What your Medigap or supplemental insurance policy covers? | 1995–1999 |

The percentage of beneficiaries whose questions on benefits or changes in the Medicare program were answered by the information they received stayed consistently high throughout the 5-year period, over 83 percent in all years (Exhibit B10). Similarly, throughout the period, beneficiaries responded that most questions were answered by the information they received on the availability and benefits of Medicare managed care plans (Exhibit B11). The rate rose significantly to 95 percent by 1998 and then fell to 90 percent in 1999. The percentage of beneficiaries whose questions on what their Medigap or supplemental insurance policy covered were answered by the information they received significantly increased between the period of 1995 to 1997 (approximately 86 percent) and the 2 years of 1998 and 1999, in which it rose to approximately 95 percent (Exhibit B12).

5.0 Conclusions

For each of the Medicare education campaign goals, we evaluated measures relating to the *Medicare & You 2000* Handbook and other campaign materials using cross-sectional data from the 1999 MCBS. We also examined trends in achieving other selected campaign goal outcomes over a 5-year period.

In the cross-sectional analysis, we found that over half of beneficiaries had access to the Handbook; they remembered receiving a copy. Multinomial logit analysis comparing whether beneficiaries said they did not receive the Handbook versus received a copy found that younger beneficiaries and those more likely to use the materials themselves were more likely to remember receiving it, while those with less than a ninth grade education were less likely. In addition, we compared whether beneficiaries said they did not know whether they received the Handbook versus received a copy. We found that those with some high school and those with greater than a high school education were significantly more likely than those with a high school education to not know whether they had received the Handbook, perhaps indicating that these beneficiaries were having difficulty remembering the Handbook as a distinct document compared to the various other materials they may use to obtain information on Medicare. Of those who remembered receiving the Handbook, virtually all still had a copy, suggesting it was being retained as a reference document.

Awareness of the 1-800-Medicar(e) toll-free number was not as high as the percentage of beneficiaries who said they had received a copy of the *Medicare & You 2000* Handbook. Beneficiaries who made their own healthcare decisions and those enrolled in managed care plans were more likely to be aware of the toll-free number. Among beneficiaries who had Internet access, only a small percentage visited the official web site for Medicare information.

Eighty-six percent of beneficiaries who said they received the Handbook found it at least somewhat easy to understand. A low level of education was associated with a lower level of understanding of the material, while a greater level of understanding was associated with making one's own healthcare decisions, being enrolled in a managed care plan, and having supplemental insurance through an employer.

Further evidence that the Handbook is being used as a reference tool is reflected in the finding that, among those who kept the Handbook, most had not read it thoroughly and a third had not read it at all. In addition, most had not used the Handbook for the two tasks included in the survey: looking up a telephone number or finding out about managed care plan options. Beneficiaries less than 65 years old

were more likely to have read more of the Handbook than beneficiaries 65 to 75 years of age, and these individuals were more likely to have used the Handbook to look up a telephone number. Also, as was found for the goals of awareness and understanding, those who made their own healthcare decisions were likely to have read more of the Handbook.

In the trend analysis, we found that a small percentage of beneficiaries said they needed or tried to access information on five selected topics of interest: benefits or changes in the Medicare program, what medical services Medicare does and does not cover, what Medigap or supplemental insurance policies cover, the availability and benefits of Medicare managed care plans such as HMOs, and what beneficiaries need to pay for a particular service. Still, significant increases occurred in the percentage of beneficiaries who tried to find out information between 1998 and 1999, before and after the national distribution of the *Medicare & You* Handbook. The most common sources of information for beneficiaries stayed relatively constant over time, but by 1999, Medicare publications had become a frequent choice and not being able to find information was no longer one of the top five responses.

Trends in beneficiary knowledge were measured by three quizzes, which could only be compared between 1998 and 1999 due to limitations across years in comparability of MCBS questions. No differences between years were found. The majority of beneficiaries were satisfied with the availability of information throughout the 1995 to 1999 time period, but the proportion significantly declined between 1998 and 1999. This change is mostly driven by an increase between the 2 years in the percentage of beneficiaries who did not know their level of satisfaction (were ambivalent) with the availability of information.

The analyses performed in this report will be repeated during the second year of this research (Phase 3.2). At that time, we will observe whether similar relationships occur in the cross-sectional analyses of the 2000 MCBS data and whether trends found before and after the first national distribution of the *Medicare & You* Handbook continue after the second national distribution of the Handbook. The amount of information beneficiaries are trying to access appears to be growing. The sources of information that they rely on have not changed appreciably over time, but beneficiaries are beginning to rely more on information being made available by the Medicare program. As the new information sources become more familiar, it will be interesting to observe whether beneficiaries become more aware that they received the information and more confident in knowing how to use it to learn about Medicare topics of interest.

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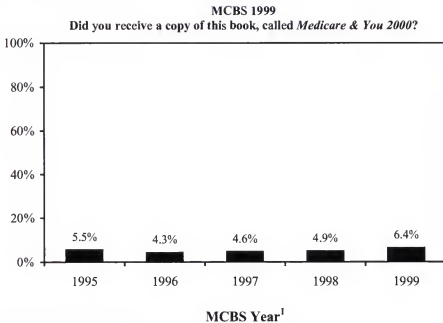
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Appendix A

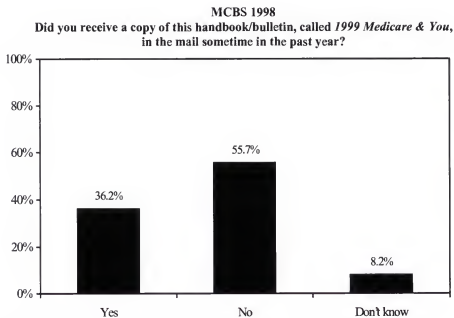
Cross-Sectional Analysis

Exhibit A1. Question BK28



Note: Analysis of weighted data (n=4,330).

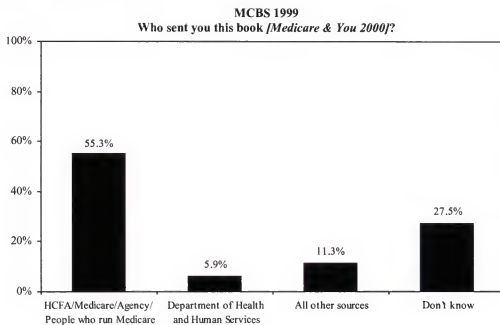
Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 26 (fielded Jan-Apr 2000).



Note: Analysis of weighted data (n=14,546).

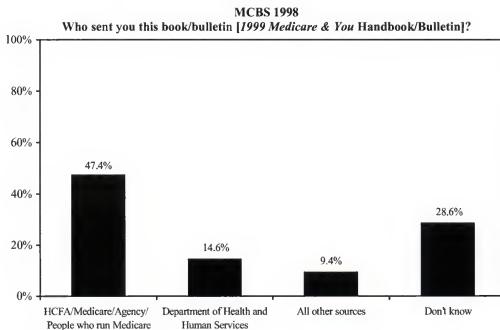
Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1998 Access to Care files, Round 23 (fielded Jan-Apr 1999).

Exhibit A2. Question BK29



Note: Analysis of weighted data (n=4,339).

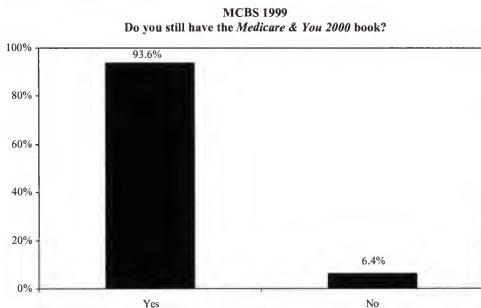
Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 26 (fielded Jan-Apr 2000).



Note: Analysis of weighted data (n=5,176).

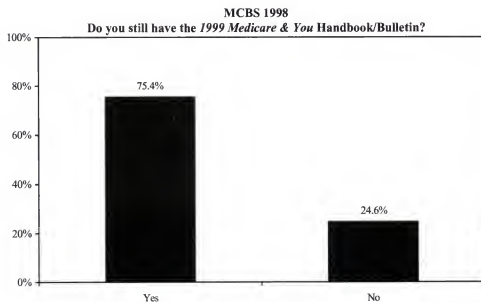
Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1998 Access to Care files, Round 23 (fielded Jan-Apr 1999).

Exhibit A3. Question BK40



Note: Analysis of weighted data (n=2,362).

Source: Centers for Medicare & Medicaid Services, ORD1. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 26 (fielded Jan-Apr 2000).



Note: Analysis of weighted data (n=4,767).

Source: Centers for Medicare & Medicaid Services, ORD1. Medicare Current Beneficiary Survey, 1998 Access to Care files, Round 23 (fielded Jan-Apr 1999).

Exhibit A4. Logistic regression results concerning the education campaign goal of access to information-campaign materials

| Characteristic | BK28 Received copy of the Handbook no vs. yes (n = 3342) | | BK28 Received copy of the Handbook don't know vs. yes (n = 2254) | | BK40 Still have copy of the Handbook (n = 1983) | |
|---|--|------------|--|------------|--|------------|
| | Coefficient | Std. Error | Coefficient | Std. Error | Coefficient | Std. Error |
| Age | | | | | | |
| Less than 65 | 0.128 | 0.138 | -0.663* | 0.336 | 0.144 | 0.437 |
| 65-75 | -0.295* | 0.080 | -0.411* | 0.173 | 0.025 | 0.223 |
| Gender | | | | | | |
| Male | -0.108 | 0.081 | 0.073 | 0.201 | 0.186 | 0.224 |
| Race | | | | | | |
| White | -0.143 | 0.116 | 0.365 | 0.221 | 0.032 | 0.257 |
| Education | | | | | | |
| Less than 9th grade | 0.547* | 0.121 | 0.354 | 0.278 | -0.090 | 0.343 |
| Some high school | 0.472* | 0.102 | 0.467* | 0.221 | -0.415 | 0.277 |
| Greater than high school | 0.063 | 0.098 | 0.581* | 0.198 | -0.124 | 0.256 |
| Marital status | | | | | | |
| Widowed | 0.024 | 0.092 | 0.385 | 0.200 | 0.157 | 0.293 |
| Separated/divorced | 0.115 | 0.123 | 0.182 | 0.286 | 0.117 | 0.348 |
| Never married | 0.310 | 0.181 | 0.706 | 0.378 | 0.061 | 0.463 |
| Self-reported health status | | | | | | |
| Excellent/very good | -0.062 | 0.097 | -0.161 | 0.223 | 0.166 | 0.262 |
| Good | -0.067 | 0.093 | -0.148 | 0.230 | 0.193 | 0.258 |
| Survey respondent | | | | | | |
| Self | -1.125* | 0.275 | -0.971 | 0.528 | -0.042 | 1.047 |
| Health care decision making | | | | | | |
| Makes own decisions | -0.234* | 0.086 | -0.528* | 0.191 | 0.197 | 0.211 |
| Managed care enrollee | | | | | | |
| Enrolled in Medicare managed care plan or other HMO at any time during the year | -0.029 | 0.131 | 0.408 | 0.314 | 0.115 | 0.427 |
| Employer-sponsored coverage | | | | | | |
| Had employer-sponsored coverage at any time during the year | -0.200 | 0.206 | -0.287 | 0.460 | 0.544 | 0.651 |
| Privately purchased coverage | | | | | | |
| Had privately purchased coverage at any time during the year | -0.117 | 0.211 | -0.170 | 0.462 | 0.188 | 0.617 |
| Medicaid coverage | | | | | | |
| Had Medicaid coverage at any time during the year | 0.294 | 0.233 | -0.020 | 0.436 | 0.731 | 0.641 |

(continued)

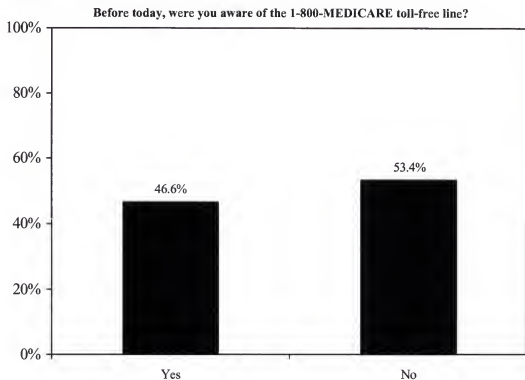
Exhibit A4. (continued)

| Characteristic | BK28 Received copy of the Handbook no vs. yes (n = 3342) | | BK28 Received copy of the Handbook don't know vs. yes (n = 2254) | | BK40 Still have copy of Handbook (n = 1983) | |
|--|--|-----------|--|------------|--|------------|
| | Coefficient | Std Error | Coefficient | Std. Error | Coefficient | Std. Error |
| Other public coverage | | | | | | |
| Had other public coverage at any time during the year | -0.070 | 0.211 | -0.971 | 0.808 | -0.180 | 0.610 |
| Any supplemental coverage | | | | | | |
| Had no supplemental coverage beyond Medicare at any time during the year | -0.020 | 0.255 | -0.201 | 0.491 | 0.346 | 0.678 |
| Cable TV | | | | | | |
| Has cable TV | -0.190 | 0.098 | 0.191 | 0.200 | -0.045 | 0.258 |
| Internet access | | | | | | |
| Has access to the Internet | -0.102 | 0.093 | -0.182 | 0.168 | 0.389 | 0.249 |
| Current year charges | | | | | | |
| \$0 | 0.154 | 0.148 | -0.384 | 0.320 | 0.087 | 0.464 |
| \$1-\$600 | -0.073 | 0.137 | -0.220 | 0.293 | -0.197 | 0.312 |
| Greater than \$600 to \$2000 | -0.160 | 0.134 | -0.145 | 0.254 | 0.096 | 0.368 |
| Greater than \$2000 to \$7500 | -0.162 | 0.127 | -0.126 | 0.243 | -0.031 | 0.312 |

Note: Omitted categories include over age 75; female; nonwhite; high school graduate; married; fair/poor health; survey respondent proxy; receives help making healthcare decisions or someone else makes healthcare decisions; not enrolled in managed care at any time during the year; did not have employer-sponsored coverage at any time during the year; did not have Medigap or other privately purchased coverage at any time during the year; did not have Medicaid coverage at any time during the year; did not have any other public coverage at any time during the year; had supplemental coverage at any time during the year; did not have cable TV; did not have Internet access; Medicare charges greater than \$7,500.

* $p < .05$

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 26 (fielded Jan-Apr 2000).

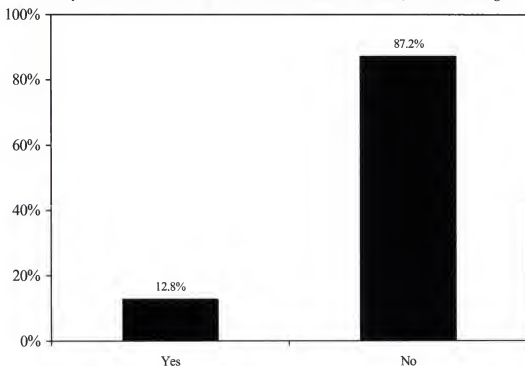
Exhibit A5. Question BK54a

Note: Analysis of weighted data (n = 4,312).

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 26 (fielded Jan-Apr 2000).

Exhibit A6. Question BN28a

Have you ever visited the official web site for Medicare information, www.Medicare.gov?



Note: Analysis of weighted data (n = 760) limited to beneficiaries (and spouses) who had ever used the Internet or another on-line service from home, the library, or elsewhere.

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 27 (fielded May–Aug 2000).

Exhibit A7. Logistic regression results concerning the education campaign goal of awareness of information-campaign materials

| Characteristic | BK54a Aware of 1-800- MEDICAR(E) (n = 3527) | | BN28a Visited Medicare website (n = 710) | |
|---|--|------------|--|------------|
| | Coefficient | Std. Error | Coefficient | Std. Error |
| Age | | | | |
| Less than 65 | 0.234 | 0.150 | 1.149* | 0.527 |
| 65-75 | 0.141 | 0.084 | 0.876 | 0.473 |
| Gender | | | | |
| Male | 0.011 | 0.083 | 0.964* | 0.298 |
| Race | | | | |
| White | -0.044 | 0.098 | -0.857* | 0.322 |
| Education¹ | | | | |
| Less than 9th grade | -0.367* | 0.141 | — | — |
| Some high school | -0.168 | 0.110 | — | — |
| Less than/Some high school | — | — | 0.564 | 0.443 |
| Greater than high school | 0.045 | 0.086 | 0.602 | 0.348 |
| Marital status² | | | | |
| Widowed | -0.177 | 0.093 | -0.031 | 0.461 |
| Separated/divorced | -0.405* | 0.125 | — | — |
| Never married | -0.314 | 0.162 | — | — |
| Never married/separated/divorced | — | — | 0.435 | 0.385 |
| Self-reported health status | | | | |
| Excellent/very good | 0.145 | 0.094 | -0.703 | 0.479 |
| Good | 0.109 | 0.089 | 0.025 | 0.340 |
| Survey respondent³ | | | | |
| Self | 0.349 | 0.302 | — | — |
| Health care decision making | | | | |
| Makes own decisions | 0.351* | 0.086 | 0.070 | 0.281 |
| Managed care enrollee | | | | |
| Enrolled in Medicare managed care plan or other HMO at any time during the year | -0.276* | 0.130 | -0.544 | 0.413 |
| Employer-sponsored coverage | | | | |
| Had employer-sponsored coverage at any time during the year | 0.197 | 0.224 | -1.445 | 1.067 |
| Privately purchased coverage | | | | |
| Had privately purchased coverage at any time during the year | 0.168 | 0.237 | -1.436 | 0.965 |
| Medicaid coverage | | | | |
| Had Medicaid coverage at any time during the year | -0.223 | 0.225 | -2.586* | 1.058 |
| Other public coverage | | | | |
| Had other public coverage at any time during the year | -0.021 | 0.251 | -1.413 | 1.468 |
| Any supplemental coverage | | | | |
| Had no supplemental coverage beyond Medicare at any time during the year | -0.178 | 0.226 | -2.006 | 1.180 |
| Cable TV | | | | |
| Has cable TV | 0.062 | 0.101 | 0.369 | 0.397 |

(continued)

Exhibit A7. (continued)

| Characteristic | BK54a Aware of 1-800- MEDICAR(E) (n = 3527) | | BN28a Visited Medicare website (n = 710) | |
|------------------------------------|--|------------|--|------------|
| | Coefficient | Std. Error | Coefficient | Std. Error |
| Internet access⁴ | | | | |
| Has access to the Internet | -0.016 | 0.100 | — | — |
| Current year charges | | | | |
| \$0 | -0.265* | 0.132 | -0.284 | 0.502 |
| \$1-\$600 | -0.178 | 0.140 | -0.387 | 0.462 |
| Greater than \$600 to \$2000 | 0.038 | 0.135 | -0.896 | 0.460 |
| Greater than \$2000 to \$7500 | -0.052 | 0.130 | -0.878* | 0.399 |

Note: Omitted categories include over age 75; female; nonwhite; high school graduate; married; fair/poor health; survey respondent proxy; receives help making healthcare decisions or someone else makes healthcare decisions; not enrolled in managed care at any time during the year; did not have employer-sponsored coverage at any time during the year; did not have Medigap or other privately purchased coverage at any time during the year; did not have Medicaid coverage at any time during the year; did not have any other public coverage at any time during the year; had supplemental coverage at any time during the year; did not have cable TV; did not have Internet access; Medicare charges greater than \$7,500.

¹ Due to small cell sizes that resulted in the model not converging, the categories for “less than HS” and “some HS” were combined for BN 28a.

² Due to small cell sizes that resulted in the model not converging, the categories for “separated/divorced” and “never married” were combined for BN 28a.

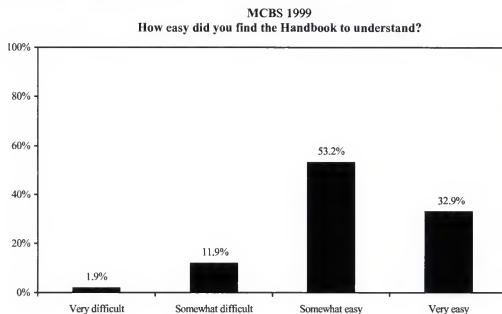
³ Due to small cell sizes that resulted in the model not converging, the variable for survey respondent could not be included in the model for BN 28a.

⁴ Due to small cell sizes that resulted in the model not converging, the variable for Internet access could not be included in the model for BN 28a.

* $p < .05$

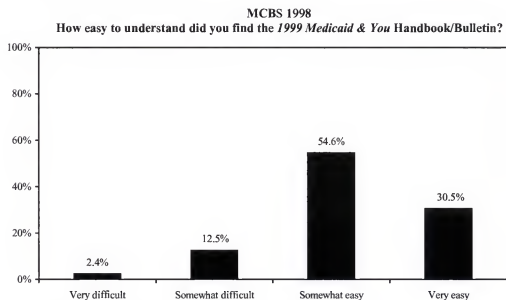
Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 26 (fielded Jan–Apr 2000) and Round 27 (fielded May–Aug 2000).

Exhibit A8. Question BK33



Note: Analysis of weighted data (n = 1,615).

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 26 (fielded Jan–Apr 2000).



Note: Analysis of weighted data (n = 3,668).

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1998 Access to Care files, Round 23 (fielded Jan–Apr 1999).

Exhibit A9. Logistic regression results concerning the education campaign goal of understanding campaign materials

| Characteristic | BK33 How easy Handbook was to understand (n = 1,366) | |
|---|--|------------|
| | Coefficient | Std. Error |
| Age | | |
| Less than 65 | 0.392 | 0.255 |
| 65-75 | 0.185 | 0.125 |
| Gender | | |
| Male | 0.217 | 0.133 |
| Race | | |
| White | 0.233 | 0.155 |
| Education | | |
| Less than 9th grade | -0.835* | 0.258 |
| Some high school | -0.196 | 0.204 |
| Greater than high school | -0.209 | 0.128 |
| Marital status | | |
| Widowed | -0.115 | 0.146 |
| Separated/divorced | -0.323 | 0.184 |
| Never married | -0.110 | 0.311 |
| Self-reported health status | | |
| Excellent/very good | 0.408* | 0.178 |
| Good | 0.477* | 0.162 |
| Survey respondent | | |
| Self | 0.420 | 0.565 |
| Health care decision making | | |
| Makes own decisions | 0.379* | 0.149 |
| Managed care enrollee | | |
| Enrolled in Medicare managed care plan or other HMO at any time during the year | 0.408* | 0.191 |
| Employer-sponsored coverage | | |
| Had employer-sponsored coverage at any time during the year | 0.593* | 0.276 |
| Privately purchased coverage | | |
| Had privately purchased coverage at any time during the year | 0.253 | 0.261 |
| Medicaid coverage | | |
| Had Medicaid coverage at any time during the year | 0.371 | 0.313 |

(continued)

Exhibit A9. (continued)

| Characteristic | BK33 | |
|--|-------------------------------------|------------|
| | How easy Handbook was to understand | |
| | (n = 1,366) | |
| | Coefficient | Std. Error |
| Other public coverage | | |
| Had other public coverage at any time during the year | 0.251 | 0.366 |
| Any supplemental coverage | | |
| Had no supplemental coverage beyond Medicare at any time during the year | 0.155 | 0.315 |
| Cable TV | | |
| Has cable TV | -0.115 | 0.135 |
| Internet access | | |
| Has access to the Internet | 0.255* | 0.127 |
| Current year charges | | |
| \$0 | 0.071 | 0.239 |
| \$1-\$600 | 0.149 | 0.188 |
| Greater than \$600 to \$2000 | 0.153 | 0.204 |
| Greater than \$2000 to \$7500 | 0.197 | 0.188 |

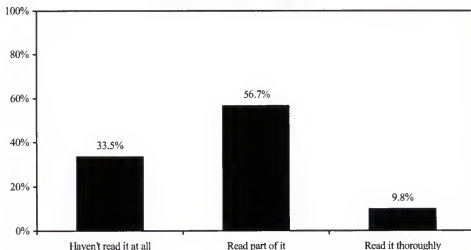
Note: Omitted categories include over age 75; female; nonwhite; high school graduate; married; fair/poor health; survey respondent proxy; receives help making healthcare decisions or someone else makes healthcare decisions; not enrolled in managed care at any time during the year; did not have employer-sponsored coverage at any time during the year; did not have Medigap or other privately purchased coverage at any time during the year; did not have Medicaid coverage at any time during the year; did not have any other public coverage at any time during the year; had supplemental coverage at any time during the year; did not have cable TV; did not have Internet access; Medicare charges greater than \$7,500.

* p < .05

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 26 (fielded Jan-Apr 2000).

Exhibit A10. Question BK30

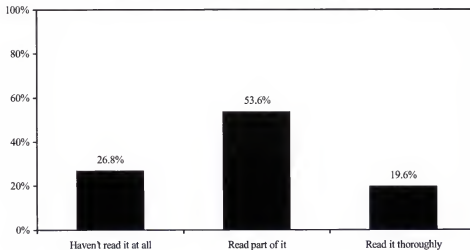
MCBS 1999
**Would you say you have read this book thoroughly, that you have read parts of it,
or that you haven't read it at all?**



Note: Analysis of weighted data (n = 4,345).

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 26 (fielded Jan–Apr 2000).

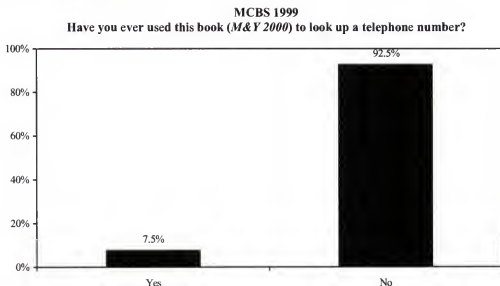
MCBS 1998
**Would you say that you have read this book/bulletin thoroughly, that you have
read parts of it, or that you haven't read it at all?**



Note: Analysis of weighted data (n = 5,163).

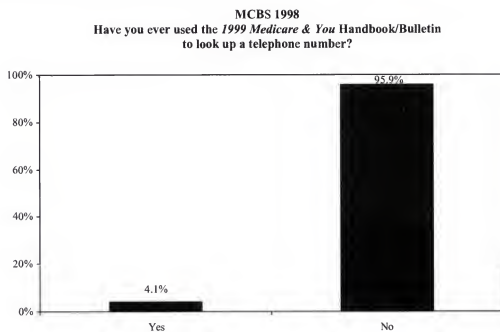
Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1998 Access to Care files, Round 23 (fielded Jan–Apr 1999).

Exhibit A11. Question BK31



Note: Analysis of weighted data (n = 2,456).

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 26 (fielded Jan–Apr 2000).

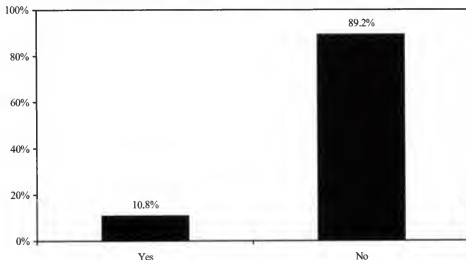


Note: Analysis of weighted data (n = 5,169).

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1998 Access to Care files, Round 23 (fielded Jan–Apr 1999).

Exhibit A12. Question BK32**MCBS 1999**

Have you ever used this book (*M&Y 2000*) to find information about health plan options available to you, such as Medicare managed care plans, HMOs, or supplemental plans?

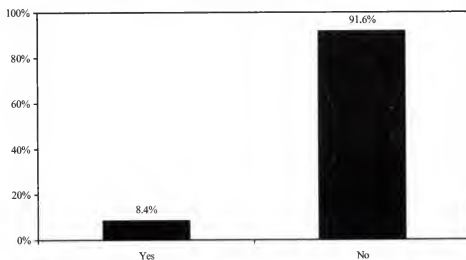


Note: Analysis of weighted data (n = 2,453).

Source: Centers for Medicare & Medicaid Services, ORD. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 26 (fielded Jan–Apr 2000).

MCBS 1998

Have you ever used the *1999 Medicare & You Handbook/Bulletin* to find information about health plan options available to you, such as Medicare managed care plans, HMOs, or supplemental plans?



Note: Analysis of weighted data (n = 5,170).

Source: Centers for Medicare & Medicaid Services, ORD. Medicare Current Beneficiary Survey, 1998 Access to Care files, Round 23 (fielded Jan–Apr 1999).

Exhibit A13. Logistic regression results concerning the education campaign goal of impact/use of campaign materials

| Characteristic | BK30 Did not read Handbook at all, read part, read it thoroughly (n = 2,057) | | BK31 Used Handbook to get telephone number (n = 2,056) | | BK32 Used Handbook to find out about health plan options (n = 2,054) | |
|---|--|------------|--|------------|--|------------|
| | Coefficient | Std. Error | Coefficient | Std. Error | Coefficient | Std. Error |
| Age | | | | | | |
| Less than 65 | 0.344* | 0.175 | 0.581 | 0.333 | 0.882* | 0.306 |
| 65-75 | 0.004 | 0.090 | 0.086 | 0.233 | 0.223 | 0.197 |
| Gender | | | | | | |
| Male | 0.025 | 0.093 | -0.059 | 0.203 | 0.114 | 0.160 |
| Race | | | | | | |
| White | 0.183 | 0.144 | -0.340 | 0.267 | 0.086 | 0.238 |
| Education | | | | | | |
| Less than 9th grade | -0.816* | 0.144 | -0.550 | 0.388 | -0.370 | 0.290 |
| Some high school | -0.480* | 0.143 | -0.019 | 0.325 | 0.066 | 0.278 |
| Greater than high school | 0.005 | 0.126 | 0.261 | 0.193 | 0.229 | 0.187 |
| Marital status | | | | | | |
| Widowed | -0.070 | 0.111 | -0.712* | 0.261 | 0.215 | 0.210 |
| Separated/divorced | -0.407* | 0.176 | -0.013 | 0.292 | -0.073 | 0.275 |
| Never married | -0.664* | 0.244 | -0.275 | 0.415 | -0.612 | 0.431 |
| Self-reported health status | | | | | | |
| Excellent/very good | -0.014 | 0.136 | 0.115 | 0.264 | -0.150 | 0.208 |
| Good | -0.111 | 0.123 | 0.254 | 0.258 | -0.137 | 0.192 |
| Survey respondent¹ | | | | | | |
| Self | 0.373 | 0.422 | — | — | — | — |
| Health care decision making | | | | | | |
| Makes own decisions | 0.553* | 0.096 | 0.111 | 0.216 | 0.225 | 0.162 |
| Managed care enrollee | | | | | | |
| Enrolled in Medicare managed care plan or other HMO at any time during the year | -0.013 | 0.196 | 0.066 | 0.317 | 0.297 | 0.247 |
| Employer-sponsored coverage | | | | | | |
| Had employer-sponsored coverage at any time during the year | -0.262 | 0.274 | 0.627 | 0.532 | 0.053 | 0.501 |
| Privately purchased coverage | | | | | | |
| Had privately purchased coverage at any time during the year | -0.100 | 0.258 | 0.382 | 0.543 | 0.274 | 0.494 |
| Medicaid coverage | | | | | | |
| Had Medicaid coverage at any time during the year | -0.229 | 0.279 | 0.850 | 0.613 | 0.066 | 0.505 |

(continued)

Exhibit A13. (continued)

| Characteristic | BK30 Did not read Handbook at all, read part, read it thoroughly (n = 2,057) | | BK31 Used Handbook to get telephone number (n = 2,056) | | BK32 Used Handbook to find out about managed care (n = 2,054) | |
|--|--|------------|--|------------|---|------------|
| | Coefficient | Std. Error | Coefficient | Std. Error | Coefficient | Std. Error |
| Other public coverage | | | | | | |
| Had other public coverage at any time during the year | 0.411 | 0.221 | -0.372 | 0.715 | -0.223 | 0.486 |
| Any supplemental coverage | | | | | | |
| Had no supplemental coverage beyond Medicare at any time during the year | -0.106 | 0.305 | 0.442 | 0.590 | -0.112 | 0.579 |
| Cable TV | | | | | | |
| Has cable TV | -0.183 | 0.107 | -0.388 | 0.208 | -0.435* | 0.194 |
| Internet access | | | | | | |
| Has access to the Internet | 0.099 | 0.116 | 0.514* | 0.190 | 0.340 | 0.181 |
| Current year charges | | | | | | |
| \$0 | 0.001 | 0.216 | -0.316 | 0.361 | -0.019 | 0.270 |
| \$1-\$600 | -0.005 | 0.158 | -0.341 | 0.328 | -0.131 | 0.290 |
| Greater than \$600 to \$2000 | -0.020 | 0.150 | 0.221 | 0.308 | 0.169 | 0.257 |
| Greater than \$2000 to \$7500 | -0.066 | 0.151 | -0.219 | 0.303 | -0.312 | 0.276 |

Note: Omitted categories include over age 75; female; nonwhite; high school graduate; married; fair/poor health; survey respondent proxy; receives help making healthcare decisions or someone else makes healthcare decisions; not enrolled in managed care at any time during the year; did not have employer-sponsored coverage at any time during the year; did not have Medigap or other privately purchased coverage at any time during the year; did not have Medicaid coverage at any time during the year; did not have any other public coverage at any time during the year; had supplemental coverage at any time during the year; did not have cable TV; did not have Internet access; Medicare charges greater than \$7,500.

¹ Due to small cell sizes that resulted in the model not converging, the category survey respondent was not included in the analysis of BK31 and BK32.

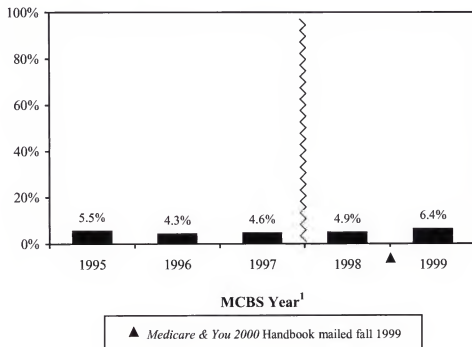
* p < .05

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1999 Access to Care files, Round 26 (fielded Jan–Apr 2000).

Appendix B

Trend Analysis

Exhibit B1. Trends in the percentage of Medicare beneficiaries who needed to (MCBS 1995–1997)/tried to (MCBS 1998–1999) find information in the past year about new benefits or changes in the Medicare program



Note: Trends were calculated from weighted responses to the following questions:

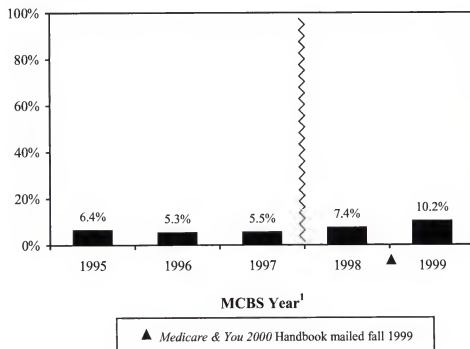
- PR2a (MCBS 1995–1997): In the past year, have you *needed* to find information about any new benefits or changes in the Medicare program?
- BK7 (MCBS 1998–1999): In the past year, have you *tried* to find information about any new benefits or changes in the Medicare program?

Differences between years were significant ($p < .01$) between 1995 and 1996, 1995 and 1997, and 1998 and 1999.

¹ See Exhibit 1 for the data collection period for each of the MCBS survey years.

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1995–1999 Access to Care files, various rounds.

Exhibit B2. Trends in the percentage of Medicare beneficiaries who needed to (MCBS 1995–1997)/tried to (MCBS 1998–1999) find information in the past year about what medical services Medicare covers and does not cover



Note: Trends were calculated from weighted responses to the following questions:

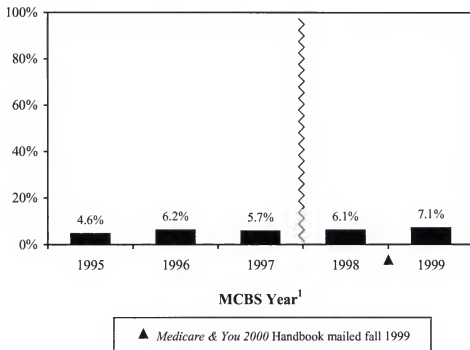
- PR8 (MCBS 1995–1997): In the past year, have you *needed* to find information about what medical services Medicare covers and does not cover?
- BK11 (MCBS 1998–1999): In the past year, have you *tried* to find information about what medical services Medicare covers and does not cover?

Differences between years were significant ($p < .01$) between 1995 and 1996, 1995 and 1997, and 1998 and 1999.

¹ See Exhibit 1 for the data collection period for each of the MCBS survey years.

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1995–1999 Access to Care files, various rounds.

Exhibit B3. Trends in the percentage of Medicare beneficiaries who needed to (MCBS 1995–1997)/tried to (MCBS 1998–1999) find information in the past year about the availability and benefits of Medicare managed care plans, such as HMOs



Note: Trends were calculated from weighted responses to the following questions:

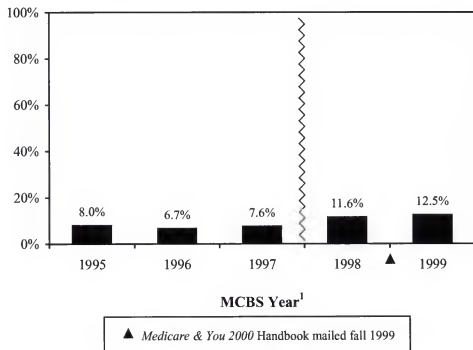
- PR16a (MCBS 1995–1997): In the past year, have you needed to find information about the availability and benefits of health maintenance organizations or HMOs?
- BK15 (MCBS 1998–1999): In the past year, have you tried to find out about the availability and benefits of Medicare managed care plans, such as HMOs?

Differences between years were significant ($p < .01$) between 1995 and 1996, and 1995 and 1997.

¹ See Exhibit 1 for the data collection period for each of the MCBS survey years.

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1995–1999 Access to Care files, various rounds.

Exhibit B4. Trends in the percentage of Medicare beneficiaries who needed to (MCBS 1995–1997)/tried to (MCBS 1998–1999) find information in the past year about what their Medigap or supplemental insurance policy covers



Note: Trends were calculated from weighted responses to the following questions:

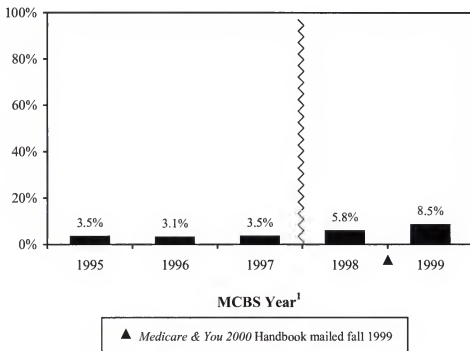
- PR11 (MCBS 1995–1997): In the past year, have you needed to find out information about what your Medigap (supplemental) insurance policy covers?
- BK19 (MCBS 1998–1999): In the past year, have you tried to find information about what your Medigap or supplemental insurance policy covers?

Differences between years were significant ($p < .01$) between 1995 and 1996.

¹ See Exhibit 1 for the data collection period for each of the MCBS survey years.

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1995–1999 Access to Care files, various rounds.

Exhibit B5. Trends in the percentage of Medicare beneficiaries who needed to (MCBS 1995–1997)/tried to (MCBS 1998–1999) find information in the past year about how much they needed to pay for a particular service



Note: Trends were calculated from weighted responses to the following questions:

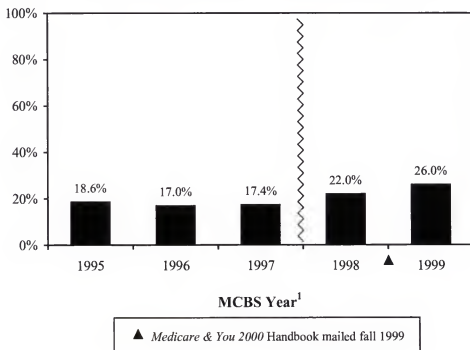
- PR14 (MCBS 1995–1997): In the past year, have you needed to find out how much you needed to pay for a particular medical service?
- BK3 (MCBS 1998–1999): In the past year, have you tried to find out how much you needed to pay for a particular medical service?

Differences between years were significant ($p < .01$) between 1998 and 1999.

¹ See Exhibit 1 for the data collection period for each of the MCBS survey years.

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1995–1999 Access to Care files, various rounds.

Exhibit B6. Trends in the percentage of Medicare beneficiaries who needed to (MCBS 1995–1997)/tried to (MCBS 1998–1999) find information about any of these five topics



Note: Trends were calculated from weighted responses to questions PR2a, PR8, PR16a, PR11, PR14 (MCBS 1995–1999) and BK7, BK11, BK15, BK19, BK3 (MCBS 1998–1999).

Differences between years were significant ($p < .01$) between 1995 and 1996, 1995 and 1997, and 1998 and 1999.

¹ See Exhibit 1 for the data collection period for each of the MCBS survey years.

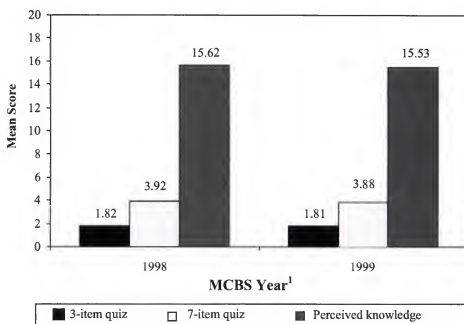
Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1995–1999 Access to Care files, various rounds.

Exhibit B7. Top five sources of Medicare information reported by Medicare beneficiaries in the MCBS: 1995 to 1999

| MCBS 1995 | MCBS 1996 | MCBS 1997 | MCBS 1998 | MCBS 1999 |
|--|---|---|--|--|
| Medigap or supplemental insurance company (28.0%) | Medigap or supplemental insurance company (23.0%) | Medigap or supplemental insurance company (22.3%) | Medigap or supplemental insurance company (28.9%) | Medigap or supplemental insurance company (22.3%) |
| Doctor (21.4%) | HMO (19.5%) | HMO (21.7%) | Doctor (16.8%) | Doctor (20.7%) |
| Did not find information (16.0%) | Doctor (18.7%) | Doctor (17.9%) | HMO (14.4%) | Medicare publications (17.8%) |
| Social security office (15.2%) | Did not find information (14.7%) | Did not find information (17.0%) | Insurance company that processes Medicare claims (14.3%) | HMO (15.3%) |
| Insurance company that processes Medicare claims (14.6%) | Social security office (14.5%) | Social security office (13.2%) | Medicare office including the telephone hotline (14.1%) | Insurance company that processes Medicare claims (14.2%) |

Note: See Exhibit 1 for the data collection period for each of the MCBS survey years.

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1995–1999 Access to Care files, various rounds.

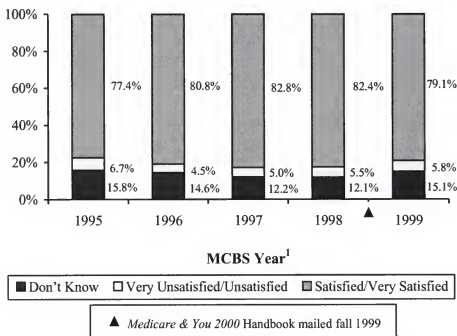
Exhibit B8. Beneficiaries' mean score on knowledge quizzes from the 1998 and 1999 MCBS

Note: Differences between years were not significant for any quizzes ($p < .01$).

¹ See Exhibit 1 for the data collection period for each of the MCBS survey years.

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1999 and 1999 Access to Care files, Rounds 26 and 27.

Exhibit B9. Trends in the percentage of Medicare beneficiaries who were satisfied in general with the availability of information about the Medicare program when they needed it (MCBS 1995–1999)



Note: Trends were calculated from weighted responses to Question PR1a/BK2/BK27aa: How satisfied in general are you with the availability of information about the Medicare program when you need it?

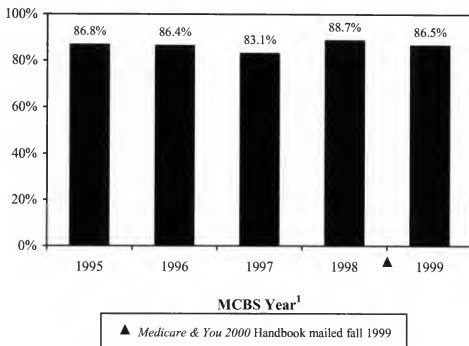
Differences between years in the percentage of beneficiaries responding "don't know" versus some level of satisfaction were significant ($p < .01$) between 1995 and each subsequent year.

Differences between years in the percentage of beneficiaries responding that they were unsatisfied/very unsatisfied versus satisfied/very satisfied were significant ($p < .01$) between 1995 and each year through 1998, 1996 compared to 1997 and 1998, 1997 compared to 1999, and 1998 compared to 1999.

¹ See Exhibit 1 for the data collection period for each of the MCBS survey years.

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1995–1999 Access to Care files, various rounds.

Exhibit B10. Trends in the percentage of Medicare beneficiaries whose questions on benefits or changes in the Medicare program were answered by the information they received (MCBS 1995–1999)



Note: Trends were calculated from weighted responses to the following questions:

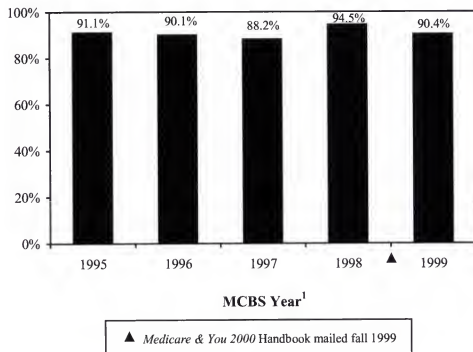
- PR4 (MCBS 1995–1997) for those who responded “yes” to PR2a: Did the information you received answer your question(s) about new benefits or changes in the Medicare program?
- BK10 (MCBS 1998–1999) for those who responded “yes” to BK7: Were your questions answered by the information you received?

Differences between years were significant ($p < .01$) between 1997 and 1998.

¹ See Exhibit 1 for the data collection period for each of the MCBS survey years.

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1995–1999 Access to Care files, various rounds.

Exhibit B11. Trends in the percentage of Medicare beneficiaries whose questions on the availability and benefits of Medicare managed care plans, such as HMOs, were answered by the information they received (MCBS 1995–1997)



Note: Trends were calculated from weighted responses to the following questions:

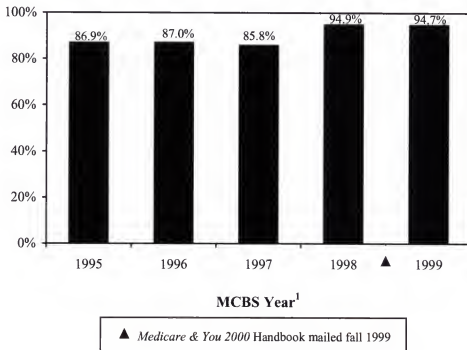
- PR16c (MCBS 1995–1997) for those who responded “yes” to PR16a: Did the information you received answer your question(s) about the availability and benefits of health maintenance organizations or HMOs?
- BK18 (MCBS 1998–1999) for those who responded “yes” to BK15: Were your questions answered by the information you received?

Differences between years were significant ($p < .01$) between 1996 and 1998, 1997 and 1998, and 1998 and 1999.

¹ See Exhibit 1 for the data collection period for each of the MCBS survey years.

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1995–1999 Access to Care files, various rounds.

Exhibit B12. Trends in the percentage of Medicare beneficiaries whose questions on what their Medigap or supplemental insurance policy covers were answered by the information they received (MCBS 1995–1999)



Note: Trends were calculated from weighted responses to the following questions:

- PR13 (MCBS 1995–1997) for those who responded “yes” to PR11: Did the information you received answer your question(s) about what your Medigap (supplemental) insurance policy covers?
- BK22 (MCBS 1998–1999) for those who responded “yes” to BK19: Were your questions answered by the information you received?

Differences between years were significant ($p < .01$) between 1995 and 1998, 1995 and 1999, 1996 and 1998, 1996 and 1999, 1997 and 1998, and 1997 and 1999.

¹ See Exhibit 1 for the data collection period for each of the MCBS survey years.

Source: Centers for Medicare & Medicaid Services, ORDI. Medicare Current Beneficiary Survey, 1995–1999 Access to Care files, various rounds.

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